

REMARKS

The present amendment is submitted in response to the Office Action dated September 16, 2009, which set a three-month period for response, making an amendment due by December 16, 2009.

Claims 1-2 and 4-13 are pending in this application.

In the Office Action, claims 1 and 11 were rejected as indefinite under 35 U.S.C. 112, second paragraph. Claims 1, 2, 10 and 11 were rejected unpatentable under 35 U.S.C. 103(a) over U.S. Patent No. 2,987,349 to Kretzmer Jr. ("Kretzmer") in view of U.S. Patent No. 4,652,781 to Andrei-Alexandru, and further in view of U.S. Patent No. 7,142,845 to Leppanen ("Leppanen"). Claims 4, 5, and 12 were rejected as unpatentable under 35 U.S.C. 103(a) over Kretzmer in view of Andrei-Alexandru and Leppanen and further in view of U.S. Pub. No. 2003/0048969 to Hunter et al ("Hunter"). Claims 6-9 and 13 were rejected as unpatentable under 35 U.S.C. 103(a) Kretzmer in view of Andrei-Alexandru, and Leppanen in view of Hunter and further in view of U.S. Patent No. 6,486,577 to Ursel et al ("Ursel").

In the present amendment, claims 1 and 11 have been amended to address the rejection under Section 112, second paragraph.

Claim 1 was further amended to define over the cited references by adding that "the toothed element has a worm gear" and that "the adjusting element has a form lock that is configured to be engaged from the inside by a

selected installation tool”. Support for this feature can be found on page 5, lines 6-7.

With regard to the art of record, the Applicant notes that the primary reference to Leppanen was published on May 12, 2005, which is AFTER the priority date of the present application, February 17, 2004 and after the related PCT application date of the present application of January 2, 2005.

Furthermore, Leppanen relates to a “blast-hole drilling rig”, subject matter which is quite remote from the present invention, that is, a gear drive unit for adjusting moving parts in a motor vehicle.

Leppanen further differs from the present invention in that this reference discloses that the “output shaft 80 of the motor has gear teeth 82 meshing with the gear teeth 89 of the inertial body 64”. That is, between the motor shaft and the “inertial body 64”, gear teeth are arranged. With the present invention, the threaded worm gear is only axially pressed with a press fit onto the armature shaft. In addition, the “inertial body 64” is supported via the roller bearing 81a, b, and no axial force is transferred onto the armature shaft in order to eliminate axial play. Thus, Leppanen provides no teaching or motivation to the practitioner that would lead him to combine this reference with Andrei-Alexandru or Kretzmer.

The same arguments hold true with regard to claim 11: the analysis constitutes impermissible hindsight using knowledge of the present invention against the invention itself. However, the Applicant has still amended claim 11 to more clearly define over the references by defining that the press fit connection is formed only over a portion of the length of the bore of the toothed element so that

the press-fit forces can be greatly reduced. Support for this limitation can be found on page 3, lines 21-25. The remaining part of the bore, then, is formed advantageously as a clearance fit.

Claim 11 as amended is therefore patentable over the cited references.

Regarding claim 12, none of the references disclose a worm gear with an axial bearing surface, in which a through bore 52 is disposed. Starting with Kretzmer, however, this configuration provides different mounting advantages, since the air can be released from the blind bore within the toothed element (upon assembly). With Hunter, in contrast, Fig. 10 shows only a “ball 20” disposed on a “plastic insert 85”. Thus, the practitioner receives no suggestion or motivation to provide a ball within a through bore /opening 52, which is disposed on the bottom surface of a bore of a worm gear.

Thus, claim 12 has been amended to define that the “toothed element 32” is formed as a “worm gear”. Amended claim 1 further defines that the ball 56 is received axially within the “worm gear 34” over half of its diameter, as shown in Fig. 1. This has the distinct advantage that the ball remains fixed there even during mounting of the “worm gear 34” within the gear housing.

The cited combination of references would not lead the practitioner to adding a through bore 52 to an axial bottom surface of the “worm gear 34” and to directly support the ball 56 in it.

This structure is not taught or suggested by Hunter, Andrei-Alexandru, Leppanen, or Kretzmer. None of these references teach or suggest forming an

air cushion upon the mounting of a worm gear on the axial end face of the armature, which is to be eliminated.

Because the amended claims include features that are not taught or disclosed by any of the cited references, the practitioner could not be led to the present invention by any combination of the art of record. It is respectfully submitted that since the prior art does not suggest the desirability of the claimed invention, such art cannot establish a prima facie case of obviousness as clearly set forth in MPEP section 2143.01. Please note also that the modification proposed by the Examiner would change the principle of operation of the prior art, so that also for this reason the references are not sufficient to render the claims prima facie obvious (see the last paragraph of the aforementioned MPEP section 2143.01).

The application in its amended state is believed to be in condition for allowance. Action to this end is courteously solicited. However, should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss appropriate claim language that will place the application into condition for allowance.

Respectfully submitted,



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